



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/599,856	07/31/2007	Peter Van De Witte	14509-0124US1 / P080499LO	5811
26161	7590	08/02/2010	EXAMINER	
FISH & RICHARDSON PC P.O. BOX 1022 MINNEAPOLIS, MN 55440-1022			CHANG, CHARLES S	
			ART UNIT	PAPER NUMBER
			2883	
			NOTIFICATION DATE	DELIVERY MODE
			08/02/2010	ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

PATDOCTC@fr.com

<b>Office Action Summary</b>	<b>Application No.</b> 10/599,856	<b>Applicant(s)</b> VAN DE WITTE ET AL.	
	<b>Examiner</b> CHARLES CHANG	<b>Art Unit</b> 2883	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 12 October 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                                    |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                                        | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948)                                                | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date <u>11/2/2009</u> . | 6) <input type="checkbox"/> Other: ____.                                                |

## **DETAILED ACTION**

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 4, and 6-7 are rejected under 35 U.S.C. 102(b) as being anticipated by Iijima et al. (US 20040027510).

Regarding claim 1, Iijima discloses a transflective liquid crystal display (LCD) device, comprising: a liquid crystal display cell (104) including an active layer; a backlight system (130) for backlighting of said display cell, a partial mirror (120) for reflecting ambient light, provided with apertures (110) for passing light originating from the backlight system, and polarizing means comprising a patterned polarizer (121) between the active layer and the backlight system, said patterned polarizer extending substantially over an area of said apertures in said partial mirror (Fig. 7).

Regarding claim 2, Iijima discloses a transflective LCD device, wherein the patterned polarizer is essentially confined within the area of the apertures of the partial mirror (Fig. 7).

Regarding claim 4, Iijima discloses a transflective LCD, wherein the patterned polarizer is a linear polarizer (Figs. 1, 7).

Regarding claim 6, Iijima discloses a transflective LCD device, wherein the partial mirror is arranged for recycling light to the backlight system (Fig. 7).

Art Unit: 2883

Regarding claim 7, Iijima discloses a transfective LCD device, wherein the polarizing means includes a reflective polarizer (Figs. 1, 7).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 3 and 5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Iijima in view of Ha et al. (US 20010017679).

Regarding claim 3, Iijima does not necessarily disclose the patterned polarizer comprising a polarizing foil and a further partial mirror having its apertures aligned with the apertures in the partial mirror, the polarizing foil being essentially sandwiched between the two partial mirrors. Ha discloses the patterned polarizer comprising a polarizing foil (115) and a further partial mirror (117) having its apertures (118) aligned with the apertures (109) in the partial mirror (107), the polarizing foil being essentially sandwiched between the two partial mirrors (Figs. 5, 8). It would have been obvious at the time of the invention to one of ordinary skill in the art to use the teachings of Ha to increase the brightness of the LCD device.

Regarding claim 5, Iijima does not necessarily disclose the polarizing means further including a quarterwave retarder between the active layer and the backlight system. Ha discloses the polarizing means further including a quarterwave retarder (113) between the active layer and the backlight system (Figs. 5, 8). It would have been obvious at the time of the invention to one of ordinary skill in the art to use the teachings of Ha to control the path of incident light to the

Art Unit: 2883

liquid crystal so that linearly polarized light is absorbed by the polarizer so that it is not returned to the outside. Therefore, since ambient light reflected by the partial mirror is cut, the black display becomes dark and the contrast ratio is improved.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to CHARLES CHANG whose telephone number is (571)270-5024. The examiner can normally be reached on Mon-Fri 9:00 A.M. - 5:00 P.M. EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Robinson can be reached on (571)272-2319. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Charles Chang/  
Patent Examiner, Art Unit 2883

/Andrew Schechter/  
Primary Examiner, Art Unit 2883

Application/Control Number: 10/599,856

Page 5

Art Unit: 2883